STATE FOREST LAND ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: Coconut Agreement #: 76068

- 2. Name of applicant: **Department of Natural Resources**
- 3. Address and phone number of applicant and contact person: Candace Johnson

Department of Natural Resources Northwest Region 919 North Township Street Sedro-Woolley, WA 98284 (360) 856-3500

- 4. Date checklist prepared: 02/02/2004
- 5. Agency requesting checklist: **Department of Natural Resources**
- 6. Proposed timing or schedule (including phasing, if applicable):

a. Auction Date: 12/13/2004
b. Planned contract end date (but may be extended): 09/30/2006
c. Phasing: Not Applicable

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain

No.

<u>Timber Sale</u>

a. Site preparation: Treatment will be assessed in 2-3 years.

b. Regeneration Method: Hand plant with conifer seedlings.

. Vegetation Management: Treatment will be assessed in 3-5 years.

d. Thinning: Treatment will be assessed in 10-15 years.

Roads: New road(s) will be used for the current proposal.

<u>Rock Pits and/or Sale:</u> The Helgramite Hard Rock Pit on the MU-43 Road located in Section 16 in Township 34 North, Range 5 East will be used for this proposal, and future road construction and road maintenance activities.

<u>Other:</u>

| 8. | List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Solution See the Coconut Road Plan for additional information. See the Coconut Road Plan September Sept |
| 9. | Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. None known |
| 10. | List any government approvals or permits that will be needed for your proposal, if known. |
| | |
| 11. | Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.) a. Complete proposal description: |
| | Proposal Area: This proposal is located approximately 6 miles southeast of Sedro-Woolley, WA. The proposal is found on rolling to hilly terrain (550 to 950 feet elevation) low on the northwest flank of Cultus Mountain. The proposal comprises 87.2 net acres of mature timber located in Sections 4, 5 and 8 of Township 34 North, Range 5 East, W.M. The area is surrounded by DNR managed land as well as private forestland. The proposal is located in the Gilligan and Nookachamps Watershed Administrative Units (WAUs). Three buffered perennial streams – a tributary of Day Creek/Beaver Lake, a tributary of the Skagit River, and Turner Creek, drain the sale. Forested Wetlands were identified/delineated to the north and northwest of the MU-ML Road in Unit #2. The roads and boundaries for the proposal have been designed to address resource protection objectives as well as operational feasibility. An estimated 75% of the timber in the proposal will be shovel yarded. All new |

<u>Timber Sale Area:</u> The timber sale area (gross acreage minus leave tree areas), as determined by GPS survey, totals 87.2 net acres and 90.1 gross acres.

Total # of Units: 2 + R/W acres
Estimated volume: 2,607 MBF
Type of harvest: Regeneration

Logging system: Cable and ground-based yarding

roads associated with this proposal will be abandoned upon completion of harvest.

Landings: 12 Rock pits and/or sales: 1

Roads: 5,370 feet of new road and 1,300 feet of road reconstruction

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Pre-harvest stand description: The proposal area is in the west Cascade hemlock zone, comprised of stands that were established in the 1940's and 1950's. The species composition and stand structure is very distinct in both units and throughout the units themselves. Widely spaced red alder (RA) dominate the majority of Unit #1, however a large consolidated patch of conifer dominated by Douglas fir (DF) is located on the southern edge of the unit. DF represents the dominant size classes, with the diameter at breast height (DBH) ranging from 12 to 40+ inches that make up Unit #2. Western hemlock (WH) and western redcedar (WRC) make up the intermediate size classes between 10-25 inches DBH. The southern compartment of Unit #2 is mostly comprised of deciduous species including RA, black cottonwood (BC) and bigleaf maple (BLM). Several large (approximately ½ acre) non-timbered voids can be found scattered throughout the southern compartment of Unit #2. Vegetation in Unit #1 and the southern compartment of Unit #2 is dominated by blackberry and salmonberry. The remainder of Unit #2's understory is considerably less dense and mostly comprised of sword ferns.

<u>Type of harvest</u>: A regeneration harvest with 844 legacy trees left scattered and in small clumps to remain for at least one more rotation.

<u>Overall unit objectives:</u> generating revenue for State Forest Board – Transfer (01); protecting water quality; maintaining productivity on the site and maintaining wildlife habitat through a tree retention strategy. This proposal meets or exceeds all of the guidelines and prescriptions set forth in the DNR Habitat Conservation Plan, Forest Resource Plan, and Forest Practices Rules and Regulations.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

| | How | Length (feet) | Acres | |
|-----------------------------------|------|---------------|-------------|---------------------------|
| Type of Activity | Many | (Estimated) | (Estimated) | Fish Barrier Removals (#) |
| Construction | | 5,370 | 1.97 | 0 |
| Reconstruction | | 1,300 | | 0 |
| Abandonment | | 5,370 | 1.97 | 0 |
| Bridge Install/Replace | 0 | | | 0 |
| Culvert Install/Replace (fish) | 1 | | | 1 |
| Culvert Install/Replace (no fish) | 13 | | | |

- 12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")
 - a. Legal description:

Section 4 of Township 34 North, Range 5 East, W.M.

Section 5 of Township 34 North, Range 5 East, W.M.

Section 8 of Township 34 North, Range 5 East, W.M.

Section 16 of Township 34 North, Range 5 East, W.M.

b. Distance and direction from nearest town (include road names):

The proposal is located approximately 6 miles southeast of Sedro-Woolley, WA.

Direction from Sedro-Woolley:

Travel on Highway 9 south for 2.6 miles

Turn left onto Old Day Creek Road and travel 2.9 miles

Turn right onto Janicki Road, Unit #1 is 0.1 miles on the right and Unit #2 is 0.7 miles on the right off the MU-ML Road.

Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under "SEPA Center.")

| WAU Name | WAU Acres | Proposal Acres |
|-------------|-----------|----------------|
| Nookachamps | 47,428 | 52.3 |
| Sub-basin 2 | 5247 | 52.3 |
| Gilligan | 18,091 | 34.9 |
| Sub-basin 9 | 1252 | 34.9 |

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)

Approximately 60% (52.3 acres) of this proposal is located within the Nookachamps WAU. The remaining 40% (34.9 acres) is within the Gilligan WAU. Both WAUs are comprised of public (i.e., federal, state, municipal, county, tribal), residential, non-industrial and industrial forest. The DNR manages 18% and 29% of the Gilligan and Nookachamps WAUs respectively.

In Sub-basin 2 of the Nookachamps WAU approximately 67 acres (1%) have been harvested on DNR managed lands in the last 14 years. No timbers sales will be sold in this sub-basin within the next year.

In Sub-basin 9 of the Gilligan WAU, approximately 21 acres (2%) have been harvested on DNR managed lands in the last 14 years. The timber sale Desert Isle is an 84-acre regeneration harvest that was auctioned on 6/16/03 for harvest, 35 acres of this sale are in the sub-basin 9 of the Gilligan WAU.

Within the Nookachamps WAU, 64% (8,948 acres) of DNR-managed land is currently forested with trees 25 years or older. An additional 5% (671 acres) of this land is forested with trees 20 years old. Scheduled DNR activities within the next fiscal year include 85 acres of regeneration harvests and 149 acres of thinning harvests.

Within the Gilligan WAU, 67% (2,081 acres) is currently forested with trees 25 years or older (hydrologically mature). An additional 2% (59 acres) is forested with trees greater than 23 years old. Including this proposal, 172 acres of regeneration harvests are tentatively scheduled for the next fiscal year. [NOTE: At least 600 acres of DNR managed forestland in the southern portion of the WAU (Sections 13 and 24 of Township 35 North, Range 6 East, W.M.) is mistakenly classified in DNR databases as less than 20 years of age. However, visual inspection of 1969 aerial photos reveals that the entire area already supported young plantations at the time. Since none have been clearcut since then, the forests on this acreage must be at least 34 years old.]

Future forest management activities in the WAU include road building, rock pit expansion, silvicultural work and timber harvesting. Activities occurring on DNR managed land will follow Forest Practices Rules, Habitat Conservation Plan (HCP) guidelines, and the Forest Resource Plan – policies designed to minimize environmental impacts. Future forest management activities on privately managed, non-DNR lands will be subject to the Forest Practice Rules.

B. ENVIRONMENTAL ELEMENTS

| 1. | Earth |
|----|-------|
| | |

| a. | General description of the site (check one): |
|----|----------------------------------------------|
| | ceneral description of the site (eneck one). |

 \square Flat, \square Rolling, \boxtimes Hilly, \square Steep Slopes, \square Mountainous, \square Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The headwaters of the 18,091-acre <u>Gilligan WAU</u> originate on the steep northern slopes of Cultus and Haystack Mountains, in the southern portions of the WAU. The topography becomes more level and rolling in the northern reaches of the WAU, and Gilligan Creek drains north into the Skagit River. Elevation ranges from 36 to 4,137 feet above sea level (mean = 1,353 feet) across the WAU. Climate is typical for Western Washington with mild, maritime temperatures, and mean precipitation levels of 50-80 inches per year. The influence of the Cascade Mountain range is felt, however, as approximately 29% of the total WAU acreage is within the snow dominated zone. Conifers dominate forest stands in this region and are composed primarily of WH with WRC in lower, wetter areas and DF in higher, drier areas. RA, BC, and BLM can also be found scattered and in smaller stands throughout the WAU.

The Nookachamps WAU consists of 47,428 acres of rolling foothills, occasional rock outcrops, mountainous terrain, and valley bottoms. The boundaries of the WAU follow the ridge line created by

Cultus Mountain west to Devil's Mountain. A low valley formed by the two mountains drains a series of lakes north into the Skagit River via Nookachamps Creek. Cultus Mountain is the highest point of the WAU at 4,027 feet while the Nookachamps Creek valley is near sea level. Slopes within the WAU are highly variable. Annual rainfall averages between 40-60 inches, increasing as one heads east into the foothills of the Cascade Mountains. Forest Vegetation Zones range from the Douglas fir zone at lower elevations, through the western hemlock zone at mid-level elevations, up to the Pacific silver fir zone in the higher elevations. In low to mid-elevations, hardwood stands are a component of the vegetation zones, including RA, BLM and/or cottonwoods.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

The proposed activity area fits the description of the WAU.

b. What is the steepest slope on the site (approximate percent slope)?

Slopes reaching 45% can be found on approximately 6 acres in Unit #2.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

| State Soil Survey # | Soil Texture or Soil Complex Name | % Slope | Acres | Mass Wasting Potential | Erosion Potential |
|------------------------|-----------------------------------------|---------|-------|---------------------------|-------------------|
| 7400 | GRAVELLY SILT LOAM | 3-15 | 22 | INSIGNIFICANT | LOW |
| 7401 | GRAVELLY SILT LOAM | 15-30 | 24 | INSIGNIFICANT | LOW |
| 7395 | SILT LOAM | 0-8 | 3 | INSIGNIFICANT | LOW |
| 0416 | GRAVELLY LOAM | 0-8 | 25 | INSIGNIFICANT | LOW |
| 7508 | GRAVELLY LOAM | 30-65 | 8 | MEDIUM | MEDIUM |
| 8107 | GRAVELLY LOAM | 15-30 | 5 | INSIGNIFICANT | LOW |

| d. | Are there si | urface indi | cations or | history o | of unstable | soils in the | immediate | vicinity? If s | o. describe. |
|------------|--------------|-------------|------------|-----------|-------------|----------------|-----------|----------------|---------------|
| u . | THE CHEEF | arrace mar | cations or | III Story | or amoundic | SOIIS III CIIC | minimi | Tioning . II b | o, accertice. |

| 1) | Surface indications: |
|----|--------------------------------------------------------------------------------------------------------------------------------------------|
| 2) | Is there evidence of natural slope failures in the sub-basin(s)? |
| | \square No \square Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: |
| 3) | Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads? |
| | \square No \boxtimes Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: Associated management activity: |
| | Shallow failures associated with road "cut" slopes can be found in the sub-basins. |

- 4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)? ⊠No ☐ Yes, describe similarities between the conditions and activities on these sites:
- 5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

Roads to be constructed or reconstructed under this proposal have been located to minimize impacts to areas where localized settling may occur. No roads have been located on slopes steeper than 45%. Roads were also designed to minimize ground-based yarding distances to 400 feet or less.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. *Approx. acreage new roads:* **2** *Approx. acreage new landings:* **1.5** *Fill source:* **Native Material**
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
 Some localized erosion could occur during road construction and log transportation activities. However, prudent road construction techniques and normal maintenance practices will minimize the amount of erosion.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):
 All new roads are to be abandoned.
- h. Propose measures to reduce or control erosion, or other impacts to the earth, if any: (Include protection measures for minimizing compaction or rutting.)

Energy dissipaters will be installed with culverts to reduce erosion. Relief pipes will be strategically placed to prevent road ditch sediment from entering live streams. Slopes that are exposed during road construction activities will be grass seeded or straw mulched to reduce sediment-laden runoff. Timing of road construction work will also minimize potential for erosion: road pioneering will not extend to more than 500 feet beyond completed construction, and culverts will be installed concurrently with construction of the road subgrade. See B.1.d.5 for additional measures.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling*, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

No emissions are anticipated other than minor amounts of equipment exhaust and road dust created by log hauling activities. Landings may be burned.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Not applicable.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

If slash burning occurs, it will adhere to the State's Smoke Management Act. Dust will be abated during hauling on a portion of the existing MU-ML Road and the proposed CJK-01 Road. Abatement treatment will be Lignin, water or a mixture of these.

3. Water

- a. Surface:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See timber sale map and forest practice base maps.)
 - a) Downstream water bodies:

Day Creek/Beaver Lake, Skagit River and Turner Creek

b) Complete the following riparian & wetland management zone table:

| Wetland, Stream, Lake, | Water Type | Number | Avg RMZ/WMZ Width in |
|-------------------------|------------|-------------|-----------------------------|
| Pond, or Saltwater Name | | (how many?) | Feet (per side for streams) |
| (if any) | | | 4 |
| UNIT #1 | | | |
| Unnamed | 3 | 1 | 160' |
| UNIT #2 | | | |
| Unnamed | 3 | 2 | 187' |
| Turner Creek | 4 | 1 | 100' |
| Wetland | Forested | 2 | 100' |

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

The average RMZ for the type 3 water found adjacent (east) Unit #1 is 160', although a 187' buffer is required by our HCP. A narrower buffer is required by the presence of power lines on the outer most reaches of the buffer. If this stream were to be buffered at a normal distance, the trees on the outer most portions of the buffer would be considered "danger trees" to the power lines due to the potential for falling into the power lines. The power lines run parallel to the Janicki Road, the Janicki Road is considered to be within the 160' RMZ.

A 187' no-cut buffer was placed on both type 3 streams found in and adjacent to Unit #2 and 100' no cut buffer was applied on the type 4 stream also located in Unit #2. In accordance with PR-14-004-150 wind buffers were not applied since both type 3 channels were less than five feet wide. One 2/5 acre forested wetland will be given a 100-foot WMZ marked with blue special management tags, from which orange painted "take" trees will be harvested leaving an average basal area of 150 square feet per acre. Since the other wetland is within a RMZ its boundary wasn't delineated.

| 2) | Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please |
|----|----------------------------------------------------------------------------------------------------------------------|
| -/ | describe and attach available plans. |
| | No ∑Yes (See RMZ/WMZ table above and timber sale map.) |
| | Description (include culverts): |
| | · · · · · · · · · · · · · · · · |

Road MU-01 will cross one of the type-3 streams found in Unit #2 with a 72-inch diameter by 50-foot long fish passage culvert. Timber removals will occur in the RMZ only in conjunction with construction of this road. Timber harvest will occur only on the western side of the other type-3 stream found in Unit #2. Timber harvesting will occur within 100' of the type-4 stream found in the southern compartment of Unit #2.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No material will be placed in, or dredged from, surface water or wetlands during the course of this proposal.

| +) | will the proposal require surface water withdrawais of diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.) |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5) | Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. $\square No \square Yes$, describe location: |
| 5) | Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. $\square Yes$, type and volume: |

XX 7°11 41

7) <u>Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?</u>

Erosion and mass wasting potential for sub-basins and WAUs:

| WAU or Sub-basin | Surface Erosion Potential (% of total acreage) | | | Mass Wasting Potential (% of total acreage) | | |
|-------------------------|---------------------------------------------------|--------|------|---------------------------------------------|--------|------|
| | Low/ Insignif. | Medium | High | Low/ Insignif. | Medium | High |
| Gilligan WAU | 41% | 40% | 12% | 46% | 42% | 8% |
| Gilligan Sub-Basin 9 | 67% | 20% | 2% | 67% | 20% | 2% |
| Nookachamps WAU | 51% | 28% | 11% | 61% | 28% | 8% |
| Nookachamps Sub-Basin 2 | 52% | 23% | 10% | 65% | 23% | 7% |

| 8) | Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)? |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | \square No \square Yes, describe changes and possible causes: |
| 9) | Could this proposal affect water quality based on the answers to the questions 1-8 above? \square No \square Yes, explain: |
| | Please refer to B-1-d-5 and B-1-h for measures that will protect water quality. |
| 10) | What are the approximate road miles per square mile in the WAU and sub-basin(s)? Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor? No Yes, describe: Nookachamps WAU: 4.6 road miles per square mile. |
| | Gilligian WAU: 2.9 road miles per square mile. |
| 11) | Is the proposal within a significant rain-on-snow (ROS) zone? If not, STOP HERE and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below. No Yes, approximate percent of WAU in significant ROS zone. Approximate percent of sub-basin(s): |
| 12) | If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU <u>or</u> subbasin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature? |
| 13) | Is there evidence of changes to channels associated with peak flows in the WAU <u>or</u> sub-basin(s)? No Yes, describe observations: None known. |
| 14) | Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact. |
| | This proposal is located in rain-dominated portions of the Nookachamps WAU and Gilligan WAU. Therefore, proposed timber removal activities should have minimal impact on peak flows. |

Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or

movements as a result of this proposal? \square No \square Yes, possible impacts:

Due to the protective measures cited in B-3-a-1-c and B-3-a-2, significant changes in water amount, quality or movement will not occur.

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.

Please refer to B-3-a-1-c and B-3-a-2.

b. Ground Water:

 Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Channeling water through ditches and culverts emptying out onto the forest floor will increase surface saturation in a local area, but is not expected to increase ground water.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Insignificant amounts of oil and other lubricants could be discharged inadvertently as a result of heavy equipment use. No lubricants will be disposed of onsite.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?

 \square No \boxtimes Yes, describe: Residential water intakes exist along all three perennial streams found in the proposal. Changes in groundwater amounts, timing, or movements aren't expected as a result of this proposal. PUD was contacted in conjunction with the location of the proposal area in relation to these water intakes.

Note protection measures, if any. See B.3.a.1.c.

- c. Water Runoff (including storm water):
 - Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff from the road surfaces will be collected in ditches and diverted to stable areas on the forest floor through the uses of ditches, culverts, and energy dissipaters. This water should not flow into surface waters.

2) Could waste materials enter ground or surface waters? If so, generally describe.

It is not anticipated that waste material will enter ground or surface water as a result of this proposal.

a) Note protection measures, if any.

Please refer to B.3.c.1.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: (See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

Existing and constructed ditches, cross drain culverts, drain dips, and water bars will be used to control runoff. Straw, grass seeding, or other appropriate methods may be used on exposed soils on cut and fill slopes during the course of road construction and abandonment to prevent sediment movement. Roads and landings will be crowned to avoid water accumulations. All activities associated with this proposal will meet or exceed Forest Practices standards and the Habitat Conservation Plan.

4. Plants

| a. | Check | or c | ircle | types | of | vegetation | found | on | the | site: |
|----|-------|------|-------|-------|----|------------|-------|----|-----|-------|
|----|-------|------|-------|-------|----|------------|-------|----|-----|-------|

| deciduous tree: | ⊠alder, ⊠maple, □aspen, ⊠cottonwood, □western larch, ⊠birch, □other: |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| evergreen tree: | \square Douglas fir, \square grand fir, \square Pacific silver fir, \square ponderosa pine, \square lodgepole pine |
| | ⊠western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☐Sitka spruce, |
| | ⊠red cedar, □yellow cedar, □other: |
|]shrubs: ⊠ <i>huckl</i> | eberry, \square salmonberry, \square salal, \square other: |
| grass | |
| pasture | |
| crop or grain | |
| wet soil plants: | ⊠cattail, ☐buttercup, ☐bullrush, ⊠skunk cabbage, ⊠devil's club, ☐other: |
| | water lily, eelgrass, milfoil, other: |
| other types of ve | getation: |
| Iplant communitie | es of concern: |

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

This proposal will remove second growth conifer and hardwood trees on 87.2 acres, and will be replaced with young, mixed conifer plantations. In accordance with agency procedures, no more than 93% of the standing trees will be removed with this proposal. Some alteration of shrubs and ground vegetation may occur during the course of harvest activity.

 Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center.")

<u>Unit #1</u>

Unit 1's northern boundary is an alder stand approximately 10-15 years old. Unit 1's west, southern and eastern boundary are composed of alder dominated stands approximately 20-25 years old.

<u>Unit #2</u>

Roughly 60-year-old conifer stands similar to those described in A-11-b make up the northern boundary. Alder dominated stands approximately 20-25 years old lie to the east and south. Portions of Unit #2's western boundary is comprised of alder stands approximately 15-year-old. A power-line right-of-way bisects the unit and comprises portions of the western boundary.

2) Retention tree plan:

Legacy and reserve tree levels were determined in accordance with DNR Forestry Handbook Procedure PR 14-006-090 (May 2000).

In Unit #1, a total of 254 green/wildlife trees will be retained (an average of 8 trees per acre). In Unit #2, a total of 590 green/wildlife trees will be retained (an average of 10 trees per acre). Retention trees are both scattered and clumped to provide a wide variety of upland habitat diversity. Trees selected for retention are either in the dominant or co-dominant crown classes, containing structural characteristics important to wildlife, and indicating wind firmness.

Unit #1 has 2 leave tree clumps consisting of 106 trees trees, with the remaining 148 trees individually scattered.

Unit #2 has 6 clumps consisting of 284 trees with the remaining 306 trees individually scattered.

Retention trees are both scattered and clumped to provide a wide variety of upland habitat diversity. Trees selected for retention are generally either in the dominant or co-dominant crown classes, containing

structural characteristics important to wildlife, and indicating wind firmness. Leave tree clumps are tagged with yellow "Leave Tree Area" tags and blue butt-spots. Scattered leave trees are painted with blue rings.

c. List threatened or endangered *plant* species known to be on or near the site.

None Known.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None.

| Anima | |
|-------|--|
| | |

| Animal | |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. | Circle or check any birds animals <i>or unique habitats</i> which have been observed on or near the site or are known to be on o near the site: |
| | birds: \[\bar{\text{hawk}}, \ \bar{\text{heron}}, \ \bar{\text{eagle}}, \ \sqrt{\text{songbirds}}, \ \sqrt{\text{pigeon}}, \ \] other: mammals: \[\sqrt{\text{deer}}, \ \bar{\text{bear}}, \ \bar{\text{elk}}, \ \bar{\text{beaver}}, \ \] other: fish: \[\bar{\text{bass}}, \ \salmon, \ \sqrt{\text{trout}}, \ \bar{\text{herring}}, \ \bar{\text{ellfish}}, \ \bar{\text{other:}} unique habitats: \[\text{talus slopes}, \ \Bar{\text{caves}}, \ \Bar{\text{cliffs}}, \ \Bar{\text{ook woodlands}}, \ \Bar{\text{balds}}, \ \Bar{\text{mineral springs}} |
| b. | List any threatened or endangered species known to be on or near the site (include federal- and state-listed species). |
| | A bald eagle nest is known to be over a mile northeast of the northernmost edge of the sale area. |
| c. | Is the site part of a migration route? If so, explain. ⊠Pacific flyway |
| | All of Washington State is considered part of the Pacific flyway. No impacts are anticipated as a result of this proposal. |
| d. | Proposed measures to preserve or enhance wildlife, if any: |
| | Trees left will consist of dominant, co-dominant, and structurally unique trees. Leave trees will be scattered and clumped. |
| | |

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs?
 Describe whether it will be used for heating, manufacturing, etc.
 Does not apply.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. **Does not apply.**
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
 Does not apply.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

There is minimal hazard due to heavy equipment operations. There is a slight chance of hydraulic or oil spills from the heavy equipment that will be operating on the site. There is a potential fire hazard if operating in moderate fire weather conditions during summer months.

- Describe special emergency services that might be required.
 None.
- 2) Proposed measures to reduce or control environmental health hazards, if any: Safe operation of all equipment will be encouraged. Industrial restrictions/precaution levels regarding forest fire protection will be enforced. The timber purchaser will be required to have fire suppression equipment on site during the restricted fire season while harvest activity is going on. Slash hazard abatement will be required within 100' of the county road.
- b. Noise
 - What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noise from log trucks and logging equipment will be present while operating during daylight hours.

- What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
 Noise from road construction and harvest activity will be present in the immediate vicinity of this proposal during the course of operations. Noise from log hauling will be present along the haul routes during the course of operations.
- 3) Proposed measures to reduce or control noise impacts, if any: None. Noise associated with harvest and road construction activity will not be audible anywhere but in the immediate vicinity of the proposal. Noise from log hauling is an historic activity in the area and should not be present above customary levels.

| 8. | Land | and Shoreline Use |
|----------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| . | a. | What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.) Forest management. |
| | b. | Has the site been used for agriculture? If so, describe. No . |
| | c. | Describe any structures on the site. None. |
| | d. | Will any structures be demolished? If so, what? No. |
| | e. | What is the current zoning classification of the site? Commercial forest land. |
| | f. | What is the current comprehensive plan designation of the site? Industrial forestry. |
| | g. | If applicable, what is the current shoreline master program designation of the site? Not applicable. |
| | h. | Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. No. |
| | i. | Approximately how many people would reside or work in the completed project? None. |
| | j. | Approximately how many people would the completed project displace? None. |
| | k. | Proposed measures to avoid or reduce displacement impacts, if any: None. |
| | l. | Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: The design of this project is consistent with current comprehensive plans and zoning regulations. |

- Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. a. Does not apply.
- Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. b. None.
- Proposed measures to reduce or control housing impacts, if any: Does not apply.

10. Aesthetics

What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed? Does not apply.

- b. What views in the immediate vicinity would be altered or obstructed?
 - Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista? 1) No ⊠Yes, viewing location:
 Residents of the Janicki Road.
 - Is this proposal visible from a major transportation or designated scenic corridor (county road, state or 2) interstate highway, US route, river, or Columbia Gorge SMA)? \square *No* \square *Yes, scenic corridor name:*
 - How will this proposal affect any views described in 1) or 2) above?

The proposed area will be consistent with other younger stands of the area.

Proposed measures to reduce or control aesthetic impacts, if any: c.

Scattered leave trees and consolidated leave tree clumps throughout the unit will help mitigate any potential aesthetic impacts. The proposed area will also be planted one growing season following harvest, further reducing any aesthetic impacts. The aesthetic impact of this proposal will be minimized with the 187° no-cut buffer placed on the type 3 water that runs parallel to the Janicki Road found in Unit #2.

11. Light and Glare

- What type of light or glare will the proposal produce? What time of day would it mainly occur? Does not apply.
- Could light or glare from the finished project be a safety hazard or interfere with views? b.
- What existing off-site sources of light or glare may affect your proposal? c.

None.

Proposed measures to reduce or control light and glare impacts, if any:
 None

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

No designated recreational opportunities currently exist. Informal use may include hunting, ORV riding, hiking, mountain biking, and horseback riding.

b. Would the proposed project displace any existing recreational uses? If so, describe:

The road systems associated with this proposal are currently gated and closed to vehicle use. Use of the sale area by other users may be limited during the course of operations due to safety/security concerns. No permanent displacement of existing use will occur as a result of this proposal.

.

 Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None. No permanent displacement of existing use will occur as a result of this proposal.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None identified in DNR's TRAX system.

 Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known.

c. Proposed measures to reduce or control impacts, if any:

(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

Does not apply.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Highway 9, the Old Day Creek Road and the Janicki Road are all public roads used to access this site.

1) Is it likely that this proposal will contribute to an <u>existing</u> safety, noise, dust, maintenance, or other transportation impact problem(s)?

There is no indication that this proposal will contribute to such a problem. As the proposal is located in a rural area, traffic is minimal. All public roads accessing the area are paved, so use of these roads should not contribute to dust or maintenance problems. Log truck traffic is consistent with the existing transportation patterns.

- Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
 No.
- c. How many parking spaces would the completed project have? How many would the project eliminate? None.
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
 - 1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all? Apart from log hauling during the course of operations, this proposal will have no impact on the overall transportation system in the surrounding area.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

For management purposes, 0.04 trips per day (approximately once a month), for the first 5-10 years after the completion of the proposal.

g. Proposed measures to reduce or control transportation impacts, if any: Safe operation of vehicles will be encouraged.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
 No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Access will be restricted as needed during periods of extreme fire danger.

16. Utilities

- Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

 Does not apply.
- Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. **Does not apply.** b.